



*Final Cont Letter*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8, MONTANA OFFICE  
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096  
HELENA, MONTANA 59626-0096

Ref: 8MO

July 29, 1998

Mr. Charles E. Harris, District Ranger  
Swan Lake Ranger District  
200 Ranger Station Road  
Bigfork, Montana 59911

Re: Hemlock Point Access Draft EIS

Dear Mr. Harris:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Environmental Protection Agency, Region VIII, Montana Office (EPA) reviewed the above-referenced Draft Environmental Impact Statement (DEIS).

The EPA recognizes the Forest Service's obligation to provide Plum Creek Timber Company (PCTC) access to their land for "reasonable use and enjoyment" relative to the Alaska National Interest Lands Conservation Act (ANILCA). The EPA, however, is very concerned about the adverse water quality and fisheries effects to Windfall Creek that are predicted to result from: 1) construction of 8 miles of roads by PCTC that switch back and forth across Section 29, including 25 stream crossings; and 2) PCTC logging of Section 29 using ground based tractor logging systems.

The DEIS states that roads are estimated to produce about a 1500% increase in sediment which would result in adverse impacts on fish habitat, and could result in substantially reduced spawning habitat and reduced fish survival. Increased runoff efficiency and water yield would have the potential to increase channel erosion, in turn increasing the chance of water quality degradation downstream from the activities. The DEIS states that there is a possibility that a remnant population of cutthroat trout may still exist in the upper areas of Windfall Creek, and the proposed action would likely have a very serious negative effect to cutthroat trout habitat. The westslope cutthroat trout have been proposed for listing under the Endangered Species Act.

Given this predicted water quality and fisheries degradation, the EPA questions the statement on page IV-8 of the DEIS that indicates that it is "assumed" that PCTC's proposed activities will comply with the Clean Water Act and the Montana Water Quality Act. The statements in the DEIS indicate that **impairments of water quality and beneficial uses in Windfall Creek are likely to result from proposed PCTC roading and timber harvest activities.** We question whether proposed PCTC road construction and timber harvest



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practices should be considered “reasonable land, soil, and water conservation practices” under the Montana Water Quality Act and its implementing rules. It is our understanding that BMPs need to effectively protect beneficial uses in order to be considered “reasonable.” The extent of water quality and fisheries degradation predicted in the DEIS brings the “reasonableness” of proposed PCTC road construction and timber harvest practices into question.

The EPA believes that PCTC road and timber harvest Best Management Practices (BMPs) should more effectively address these water quality and fisheries concerns. BMPs should be adequately designed and implemented for the physical setting of the land to avoid the amount of water quality degradation predicted in the DEIS. BMPs or “reasonable land, soil and water conservation practices” should also be accompanied by water quality monitoring that measures BMP effectiveness in protecting water quality and beneficial uses of surface waters. It is through the iterative process of designing and implementing BMPs, monitoring BMP effectiveness in protecting water quality, and adjusting BMPs, that leads to protection of beneficial uses and achievement of water quality standards.

We believe it is incumbent upon the Forest Service, PCTC, and the Montana Department of Environmental Quality to protect and maintain water quality and beneficial uses in Windfall Creek (classified A-1 by Montana Water Quality Standards). This is likely to require modification or adjustment in PCTC roading and timber harvest plans. We believe that PCTC should design and use effective BMPs, and develop and implement a Sediment Reduction Plan that includes mitigation measures to reduce water quality degradation from roads and timber harvest. Appropriate BMPs and a Sediment Reduction Plan could include: reducing the number of road stream crossings; extending the time period for road construction and timber harvest to reduce water yield and sediment yield; improving road and timber harvest BMPs; avoiding road construction and tractor logging on sensitive soils; carrying out logging on sensitive soils during winter on frozen ground to reduce erosion and sediment transport; and establishing an adequate riparian buffer between harvest units and streams.

We believe additional disclosure of PCTC harvest plans and harvest methods and improved PCTC road plans with fewer road stream crossings and improved BMPs should be provided to assure protection of Windfall Creek water quality and maintenance of water quality standards and beneficial uses. Full disclosure of PCTC road and harvest plans, including their mitigation measures, should be comprehensively and clearly presented in the final EIS so that the reviewer can better understand and evaluate the environmental consequences resulting from granting road access easements to PCTC. Judicial reviews of NEPA cases have supported not only the need for identifying mitigation measures, but also a discussion of mitigation measure effectiveness.

Given the level of water quality and fisheries degradation that is predicted to occur from the proposed action, we also question whether the NEPA requirement to “rigorously explore and objectively evaluate all reasonable alternatives” has been adequately met. If PCTC road and harvest plans cannot be appropriately modified and effective BMPs developed to mitigate the level of water quality and fisheries degradation predicted in the DEIS, we believe additional less damaging alternatives should be considered.. We note that helicopter logging is stated to be a



technologically reasonable alternative (page II-9), but was not considered in detail because it was not proposed by PCTC and the Forest Service has no authority to mandate such practices on non-Federal ownership. We believe helicopter logging would reduce predicted water quality and fisheries degradation and should be reconsidered.

We also note that purchase of PCTC lands or land exchange was quickly dismissed from detailed consideration. If effective road and timber harvest BMPs and/or helicopter logging cannot be developed to mitigate adverse water quality and fisheries impacts, we believe purchase or land exchange should be reconsidered.

The EPA also believes that monitoring is a necessary and crucial element in identifying and understanding the consequences of one's actions, and should be an integral part of any management decision. Specific monitoring information should be disclosed in the final EIS to assure that the water quality effects (i.e., physical, chemical and biological effects) and wildlife impacts of the proposed harvesting and roading activities on PCTC lands resulting from granting access easements will be determined.

We are also concerned about the potential effects of the proposed project upon the threatened grizzly bear. We note that the DEIS indicates that the proposed project "may adversely effect" the grizzly bear. We are concerned about these adverse effects (e.g., changes in grizzly bear behavior to avoid and displace bears away from roads and road activity; habitat loss and fragmentation; and increased bear mortality from increased human contact, etc.), and we encourage careful monitoring and scrutiny of grizzly bear impacts. We suggest that the terms and conditions of the Swan Valley Grizzly Bear Conservation Agreement be reviewed regularly by the Forest Service and U.S. Fish & Wildlife Service in light of actual grizzly bear impacts. It may be that the terms and conditions of the Agreement will need to be revised periodically to assure minimization of incidences of grizzly bear taking, and avoidance of jeopardy to the continued existence of the grizzly bear.

We are enclosing our comments regarding the analysis, documentation, or disclosure of potential environmental impacts of the Hemlock Point Access DEIS for your review and consideration as you complete the Final Environmental Impact Statement (FEIS). Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Hemlock Point Access DEIS has been rated as Category EO-2 (Environmental Objections - Insufficient Information). A copy of EPA's rating criteria is attached.

As can be seen from the enclosed comments, we have environmental objections regarding potential adverse effects to water quality and fisheries in Windfall Creek from PCTC road construction and timber harvest practices. The EPA also has concerns regarding the threatened grizzly bear. We believe additional information and disclosure regarding improved PCTC roading and timber harvest practices and monitoring to fully assess and mitigate all potential impacts of granting access easements should be provided in the final EIS. If PCTC road and harvest plans cannot be appropriately modified and effective BMPs developed to mitigate the level of water quality and fisheries degradation predicted in the DEIS, we believe additional less

damaging alternatives such as helicopter logging or purchase or land exchange should be reconsidered.

The EPA appreciates the opportunity to review and comment on the DEIS. If we may provide further explanation of our concerns please contact Mr. Steve Potts of my staff in Helena at (406) 441-1140 ext. 232. Thank you for the opportunity to comment.

Sincerely,

John F. Wardell  
Director  
Montana Office

Enclosure

cc: Cindy Cody/Virginia Rose, EPA, 8EPR-EP, Denver  
Ann Puffer, Forest Service-Region 1, EAP, Missoula  
Stuart Lehman, MDEQ-Resource Protection Planning Bureau, Helena  
Roxann Lincoln, MDEQ-Resource Protection Planning Bureau, Helena  
Abe Horpestad, MDEQ-Resource Protection Planning Bureau, Helena  
John Arrigo, MDEQ, Enforcement Division, Helena  
Dale Harms/Anne Vandehey, USFWS, Helena



# EPA Comments on the Hemlock Point Access Draft Environmental Impact Statement

## Brief Project Overview:

The Swan Lake District of the Flathead National Forest evaluated a proposal to grant access across National Forest System lands to the Plum Creek Timber Company (PCTC) to allow construction of 860 feet of low standard road (12 feet wide road with 20 feet of clearing) across National Forest lands in the Upper Windfall Creek drainage six miles southwest of Condon, Montana contiguous to the Mission Mountains. The area is within the recovery zone for the threatened grizzly bear. The proposed road would be constructed through the northeast corner of Section 32 in an area that is presently unroaded, to provide access to PCTC's Section 29.

The proposal would provide permanent access to 640 acres of PCTC land for reasonable use and enjoyment pursuant to the Alaska National Interest Land Conservation Act (ANILCA). The proposed road on National Forest System lands will be constructed by PCTC and used to allow access to PCTC lands for purposes of long term timber management. Once access is granted PCTC plans to construct up to 8 miles of road on its lands, including 25 road stream crossings, and conduct timber harvest activities utilizing conventional ground based harvest and yarding systems.

The Forest Service also considered the no action alternative which would not grant access to PCTC. This alternative would deny PCTC reasonable use and enjoyment of its lands which would not be consistent with ANILCA. Selection of this alternative is stated to be outside the discretion of the Forest Service, but is presented in the DEIS to provide a benchmark for comparing environmental consequences.

## Comments:

1) The EPA is concerned about potential adverse water quality and fisheries effects to Windfall Creek that are likely to result from: 1) construction of 8 miles of roads by PCTC that switch back and forth across Section 29, including 25 stream crossings; and 2) logging of Section 29 using conventional ground based tractor logging systems. The DEIS states that:

**"Proposed roads are estimated to produce about a 1500% increase in sediment (page IV-5).**

**"Increased runoff efficiency and water yield have the potential to increase channel erosion, in turn increasing the chance of water quality degradation downstream."**

The Road Impact Factor (RIF), determined by multiplying the road density by the stream crossing density would be 200, while the recommended RIF standard for this area is 25, suggesting a **high risk of watershed degradation downstream** from the land to be

accessed by this request (page IV-7).

“Windfall Creek is expected to experience a **substantial increase in fine sediment** in the Proposed Action Alternative.” (page IV-8)

“The direct and cumulative effect of such a large increase in sediment yield would be a **large increase in fine sediment in Windfall Creek**. This would result in an **adverse impact on fish habitat**.... and could result in **substantially reduced spawning habitat and reduced fish survival**.” (page IV-9)

The DEIS also states that, while there has been little fisheries population inventory in Windfall Creek, it is assumed that Windfall Creek once contained an abundant population of westslope cutthroat trout (page III-10), and there is a possibility that a remnant westslope cutthroat population still occurs in the headwaters of Windfall Creek (page III-11). If cutthroat trout do still exist in the upper areas of Windfall Creek, **the proposed action would likely have a very serious negative effect to their habitat** (page IV-11). We note that westslope cutthroat trout have been proposed for listing under the Endangered Species Act.

Given these predictions of water quality and fisheries degradation, the EPA questions the statement on page IV-8 of the DEIS that indicates that it is “assumed” that PCTC’s proposed activities will comply with the Clean Water Act and the Montana Water Quality Act. The statements from the DEIS indicate that **impairments of water quality and beneficial uses in Windfall Creek are likely to result from proposed PCTC roading and timber harvest activities**. We question whether proposed PCTC road construction and timber harvest practices should be considered “reasonable land, soil, and water conservation practices” under the Montana Water Quality Act and its implementing rules. It is our understanding that BMPs need to effectively protect beneficial uses in order to be considered “reasonable.” The extent of water quality and fisheries degradation predicted in the DEIS brings the “reasonableness” of proposed PCTC road construction and timber harvest practices into question.

The EPA believes that road and timber harvest plans and Best Management Practices (BMPs) employed by PCTC should more effectively address water quality and fisheries concerns. BMPs should be adequately designed and implemented for the physical setting of the land to avoid the amount of water quality degradation predicted in the DEIS. BMPs or “reasonable land, soil and water conservation practices” should be accompanied by water quality monitoring that measures BMP effectiveness in protecting water quality and beneficial uses of surface waters. It is through the iterative process of designing and implementing BMPs, monitoring BMP effectiveness in protecting water quality, and adjusting BMPs, that leads to protection of beneficial uses and achievement of water quality standards.

Environmental consequences on adjacent non-national forest land must be considered and disclosed when evaluating management actions on national forest land. Watershed, fisheries, and



wildlife effects of management actions can only be evaluated if actions and impacts on all land within watersheds and wildlife habitat areas are considered regardless of land ownership. While the DEIS acknowledges that PCTC road construction and timber harvest in Section 29 will be an indirect effect of the Forest Service granting access easements, the DEIS does not include much information regarding specific PCTC timber harvest plans.

We believe additional disclosure of PCTC harvest plans and harvest methods and improved road plans with fewer road stream crossings and improved BMPs should be provided to assure protection of Windfall Creek water quality and maintenance of water quality standards and beneficial uses. Full disclosure of PCTC road and harvest plans, including mitigation measures, should be comprehensively and clearly presented in the final EIS so that the reviewer can better understand and evaluate the environmental consequences resulting from granting road access easements to PCTC. Judicial reviews of NEPA cases have supported not only the need for identifying mitigation measures, but also a discussion of mitigation measure effectiveness.

Will PCTC utilize clearcut timber harvest methods? Will revegetation and replanting be done immediately after harvest to reestablish ground cover? Will there be road construction and harvest by Plum Creek within riparian areas, streamside management zones and/or wetlands? We believe that PCTC streamside management and riparian area and wetland harvest and road construction practices should be clearly described and disclosed.

We believe it is incumbent upon the Forest Service, PCTC, and the Montana Department of Environmental Quality to protect and maintain water quality and beneficial uses in Windfall Creek. This may require modification or adjustment in PCTC roading and timber harvest plans. We believe that PCTC should design and use effective BMPs, and develop and implement a Sediment Reduction Plan that includes mitigation measures to reduce water quality degradation from roads and timber harvest. BMPs and the Sediment Reduction Plan could include: reducing the number of road stream crossings; extending the time period for road construction and timber harvest to reduce water yield and sediment yield; improving road and timber harvest BMPs; avoiding road construction and tractor logging on sensitive soils; carrying out logging on sensitive soils during winter on frozen ground to reduce erosion and sediment transport; and establishing an adequate riparian buffer between harvest units and streams.

2) Given the level of water quality and fisheries degradation that is predicted to occur from the proposed action, we question whether the NEPA requirement to “rigorously explore and objectively evaluate all reasonable alternatives” has been adequately met. If PCTC road and timber harvest plans cannot be appropriately modified with development of effective BMPs that mitigate the level of water quality and fisheries degradation predicted in the DEIS, we believe additional less damaging alternatives should be considered..

We note that helicopter logging is stated to be a technologically reasonable alternative (page II-9), but was not considered in detail because it was not proposed by PCTC and it is stated that the Forest Service has no authority to mandate such practices on non-Federal ownership.



Clearly helicopter logging would reduce the predicted water quality and fisheries degradation, and should be reconsidered.

We also note that purchase of PCTC lands or land exchange was quickly dismissed from detailed consideration. If effective road and timber harvest BMPs and/or helicopter logging cannot be developed to mitigate adverse water quality and fisheries impacts, we believe purchase or land exchange should be reconsidered.

We also question whether PCTC's proposed road construction and timber harvest on Section 29 should be considered "reasonable use and enjoyment" under ANILCA. We believe assurances should be provided in the FEIS that proposed PCTC road construction and timber harvest will enable protection and maintenance of water quality and beneficial uses of streams, otherwise the EPA questions whether the proposed use is reasonable.

3) We also recommend that monitoring of water quality in Windfall Creek be conducted to validate and document BMP and Sediment Reduction Plan effectiveness and maintenance of instream beneficial uses. The effectiveness of mitigation measures can only be known if monitoring is performed and data collected. Without this information the EIS is inadequate to fully assess the role of monitoring and evaluation in project implementation. The EPA believes that water quality/aquatics monitoring is a necessary and crucial element in identifying and understanding the consequences of one's actions, and should be an integral part of any management decision. We believe a monitoring plan should be identified in NEPA documents.

We would like to see clear water quality monitoring goals and objectives identified and described in the FEIS (e.g., what questions are to be answered; what parameters are to be monitored; where and when monitoring will occur; who will be responsible; how the information will be managed and evaluated; and what actions will be taken based on that information).

The monitoring plan should at a minimum include sampling design, methodology, parameters, sampling site locations shown on a map, and frequency or pattern of sampling. The EPA strongly recommends incorporation of a biological component, such as rapid bioassessments using macroinvertebrates, in a monitoring program. Monitoring of the aquatic biological community is desirable since the aquatic community integrates the effects of pollutant stressors over time and, thus, provides a more holistic measure of impacts than grab samples of turbidity and suspended sediment. We encourage you to use the following reference materials in designing and disclosing a monitoring program:

"Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska", Lee H. McDonald, Alan W. Smart, and Robert C. Wissmar; May 1991; EPA/910/9-91-001.

"Rapid Bioassessment Protocols for Use in Streams and Rivers", James A. Plafkin; May 1989; EPA/444/4-89-001.



4) The EPA is also concerned about the potential effects of the proposed project upon the threatened grizzly bear. The DEIS indicates that the proposed project “may adversely effect” the grizzly bear. We are concerned about these adverse effects (e.g., changes in grizzly bear behavior to avoid and displace bears away from roads and road activity; habitat loss and fragmentation; and increased bear mortality from increased human contact, etc.). We encourage careful monitoring of grizzly bear impacts.

We suggest that the terms and conditions of the Swan Valley Grizzly Bear Conservation Agreement be reviewed regularly by the Forest Service and U.S. Fish & Wildlife Service in light of actual grizzly bear impacts. It may be that the terms and conditions of the Agreement will need to be revised periodically to assure minimization of incidences of grizzly bear taking, and avoidance of jeopardy to the continued existence of the grizzly bear.

We also believe the final EIS should include the Biological Assessment and associated USFWS Biological Opinion for the grizzly bear or formal concurrence for the following reasons:

- \* NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;
- \* The Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements (40 CFR 1502.25); and
- \* The Endangered Species Act (ESA) consultation process can result in the identification of mandatory, reasonable, and prudent alternatives which can significantly affect project implementation.

The potential effects on listed species are relevant to forest management activity decisions. Since both the Biological Assessment and the EIS must evaluate the potential impacts of the project on listed species, they can jointly assist in analyzing the effectiveness of project alternatives and mitigation measures. EPA recommends that the final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk FWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative. If these changes have not been evaluated in the final EIS, a supplement to the EIS would be warranted.

5) The EPA is pleased that the Forest Service evaluation avoided construction of a road in the southeast corner of Section 28 across wet areas (page I-5).

6) On pages I-4 and III-9 it is stated that the bull trout are proposed for listing as threatened or endangered. As you are undoubtedly aware the bull trout have now been listed as threatened by the U.S. Fish & Wildlife Service under the Endangered Species Act (effective July 10, 1998). The

FEIS should be updated.

7) It is stated in Chapter I that the Forest Service proposes to construct a road in Section 32 to provide PCTC with access in their Section 29, however, the Township and Range in which these Sections lie are not identified. Township and Range for these sections should be identified.

8) It is stated on page I-5 (end of next to last paragraph) that the access road would be located through the southeast corner of Forest Service Section 32. However, Map #2 in the DEIS shows the Forest Service access road in the northeast corner of Section 32. This inconsistency should be corrected.



## SUMMARY PARAGRAPH FORM

ERP NUMBER

\_\_\_\_\_

RATING ASSIGNED TO PROJECT

EO-2

NAME OF EPA OFFICIAL RESPONSIBLE  
FOR REVIEW OF PROJECT (Principle Reviewer)

Steve Potts

### SUMMARY OF COMMENT LETTER

The EPA has reviewed the Hemlock Point Access Draft Environmental Impact Statement (DEIS) prepared by the Swan Lake Ranger District of the Flathead National Forest. The EPA has environmental objections about predicted adverse effects to water quality and fisheries, and has environmental concerns about adverse effects to the threatened grizzly bear from proposed Plum Creek Timber Company (PCTC) road construction and timber harvest that will occur as a result of granting access easements. Additional information and disclosure regarding improved PCTC roading and timber harvest practices to avoid and mitigate water quality degradation, and monitoring to fully assess all potential impacts of granting access easements should be provided in the final EIS. If PCTC road and harvest plans cannot be appropriately modified and effective BMPs developed to mitigate the level of water quality and fisheries degradation predicted in the DEIS, the EPA believes additional less damaging alternatives (e.g., helicopter logging, land exchange) should be considered.

PARAGRAPH APPROVED FOR PUBLICATION

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(Initials of OFA Approving  
Official)

NOTE: Transmit 2 copies to MIU

8MO File: 9808